

Diameter AAA, Server Cannot Connect to Remote CA

IPWorks

OPERATING INSTRUCTIONS

Copyright

© Ericsson AB 2017, 2018. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

Disclaimer

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

Trademark List

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



Contents

1	Introduction	1
1.1	Alarm Description	1
1.2	Prerequisite	2
1.3	Related Information	3
2	Procedure	5
2.1	Troubleshooting the Network Issues	5
2.2	Starting All Failed CA Servers	5
	Reference List	7



Diameter AAA, Server Cannot Connect to Remote CA



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

This alarm is issued when the AAA server fails to access the specific CA Server.

The possible alarm causes and fault locations are explained in the following table.

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact	Solution
CA Server is unreachable	AAA cannot connect to CA server.	The CA servers are not reachable because of network connection issues or other network related glitches.	Network	AAA server cannot provide PKI authentication service. Non-SIM authentication fails if AAA server fails to access all the responders of one CA server at the same time.	See Section 2.1 on page 5
CA Server is unavailable	AAA cannot connect to CA server.	The specific CA Server is down.	CA Servers		See Section 2.2 on page 5

Note: An alarm can appear as a result of the maintenance activity.

The alarm attributes are listed and explained in Table 2.

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	864262



Attribute Name	Attribute Value
Managed Object Class	IpworksDiameterAAA
Source	ManagedElement=<Node Name>, SystemFunctions=1, Fm=1, FmAlarmModel=ipworksDiameterAAA, FmAlarmType= ipworksDiameterAAAConnectionToCAServerError
Specific Problem	Diameter AAA, Server Cannot Connect to Remote CA
Event Type	communicationsAlarm(2)
Probable Cause	x733RemoteNodeTransmissionError(342)
Additional Text	This alarm is raised when connection to CA Server %s error.;uuid:<Product_UUID> ⁽¹⁾
Perceived Severity	Warning

(1) <Product_UUID> is the universally unique identifier (UUID) of machine that generates the alarm. The value can be fetched from `/sys/devices/virtual/dmi/id/product_uuid` on the PL node.

1.2 Prerequisite

This section provides information on the documents, tools, and conditions that apply to the procedure.

1.2.1 Documents

Before starting this procedure, ensure that the following document has been read:

- *Fault Management*

1.2.2 Tools

Not applicable.

1.2.3 Conditions

Not applicable.



1.3 Related Information

Trademark information, typographic conventions, and definition and explanation of abbreviations and terminology can be found in the following documents:

- *Trademark Information*
- *Typographic Conventions*
- *Glossary of Terms and Acronyms*



Diameter AAA, Server Cannot Connect to Remote CA



2 Procedure

This section provides specific solutions to clear the alarm.

2.1 Troubleshooting the Network Issues

To clear the alarm, perform the following steps:

1. Check work status of CA server with **ps** and **netstat** tools.
2. Debug and troubleshoot the network issues, for example, ping the IP address, check the cable connection and etc.

The alarm is expected to be cleared automatically when the network connection returns to normal.

3. Confirm that the alarm has ceased.

If the alarm still remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

2.2 Starting All Failed CA Servers

To clear the alarm, perform the following steps:

1. Log on an SC.

```
# ssh <username>@<OAM IP Address> -t -s cli
```

2. Check the AAA server configuration, such as the CA server URL (field **ocspServers**), for example.

```
>ManagedElement=<Node Name>,IpworksFunction=1,IPWorksAAARoot=1,IPWorksDiameterAAARoot=1,DiameterAAAService=1,AAAPKIService=1,OCSPMgr=1
```

```
(OCSPMgr=1) >show -v -r
```

```
OCSPMgr=1
```

```
enableOcspCheck=true
```

```
ocspManagerId="1" <default>
```

```
softFail=true <default>
```

```
ocspServers="/C=AU/ST=Some-State/O=Internet Widgits Pty Ltd/CN=CA
```

```
name="/C=AU/ST=Some-State/O=Internet Widgits Pty Ltd/CN=CA
```

```
responderUrl
```

```
"http://127.0.0.1:12345"
```

```
useNonce=true <default>
```



3. Fix the CA server issues on the failed server.
4. Confirm the alarm has been ceased. If the alarm remains, consult the next level of maintenance support.

Further actions are outside the scope of this instruction.



Reference List

Ericsson Documents

- [1] *Trademark Information*
- [2] *Typographic Conventions*
- [3] *Glossary of Terms and Acronyms*
- [4] *Fault Management*